Our Dermatology Online

Case Report

Onychopapilloma: Report of two cases

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ABSTRACT

Onychopapilloma is a benign neoplasm of unknown etiopathogenesis of the distal nail matrix and proximal nail bed. It may have different clinical presentations, which constitute a diagnostic challenge. It is usually monodactyl and mainly affects the fingers. Despite that it is not uncommon, doctors outside of dermatology are unaware of this entity. Herein, we report two patients, with a median age of 67 years, who presented with monodactylous chromonychia, including longitudinal erythronychia and longitudinal leukonychia, associated with a subungual keratotic mass. With these clinical features, both patients were diagnosed with onychopapilloma.

Key words: Abnormal nail, Nail diseases, Nails

INTRODUCTION

Onychopapilloma is a benign tumor of the nail bed and distal matrix [1-7]. Although it is a common condition, there are currently few cases reported in the literature. It was first described by Baran and Perrin in 1995 as a localized longitudinal band of splinter hemorrhages associated with localized distal subungual keratosis. In 2000, the same authors introduced the term *onychopapilloma* [1-4]. Recent reports have described different clinical presentations, including longitudinal chromonychia, a subungual keratotic mass, splinter hemorrhages, distal fissuring, and other features, which makes it a diagnostic challenge [1-4]. It may be associated with non-specific symptoms such as pain and distal nail fragility [3,5,6].

CASE REPORT

A 62-year-old female patient consulted for contact dermatitis on the hands. During the examination, a longitudinal, white band on the right thumbnail was found (Figs. 1a and 1b). She reported a ten-year history of an asymptomatic subungual mass under the free edge of the nail plate, which had been clipping back. Dermoscopy revealed longitudinal leukonychia and a subungual keratotic mass (Figs. 2a and 2b). The rest of the physical examination revealed abdominal intertrigo and skin tags on the neck. She also referred a family history of type 2 diabetes.

The second case was a 72-year-old male who consulted for a fifteen-year history of an asymptomatic subungual mass under the free edge of the right ring fingernail. It had been diagnosed as a subungual wart and treated with topical creams with no relief. During the examination, a longitudinal, reddish band on the right ring fingernail plate was found (Fig. 3a and 3b). Dermoscopy revealed longitudinal erythronychia and a subungual keratotic mass (Fig. 4a and 4b). He also referred a personal and family history of high blood pressure.

DISCUSSION

Onychopapilloma is a benign nail tumor of the distal matrix and nail bed, yet malignancy has recently been reported. It was first described in 1995, as a localized distal subungual keratosis with multinucleated cells. In 2000, the term *onychopapilloma* was suggested by the same authors to refer to the condition [1-4]. Although its pathogenesis is unknown, some hypotheses have been suggested as a reactive hyperplasia of the nail bed epithelium due to chronic irritation or trauma,

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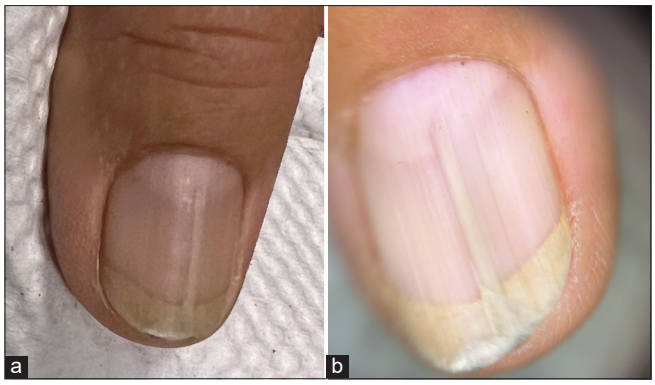


Figure 1: (a) Longitudinal leukonychia. (b) Dermatoscopy of longitudinal leukonychia on the right thumbnail.

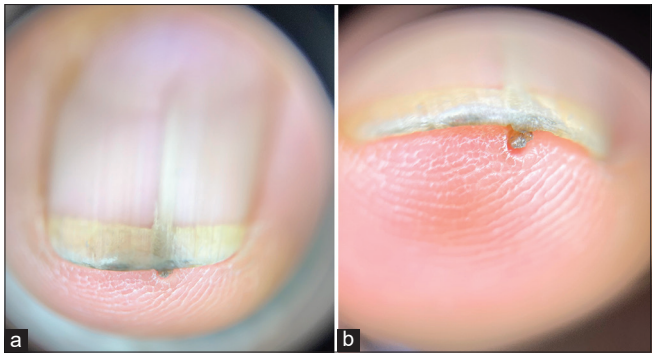


Figure 2: (a) Dermatoscopy of the subungual keratotic mass. (b) Dermatoscopy showing a close-up of the subungual keratotic mass.

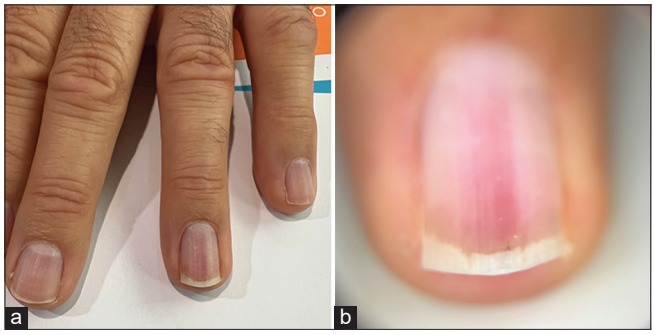
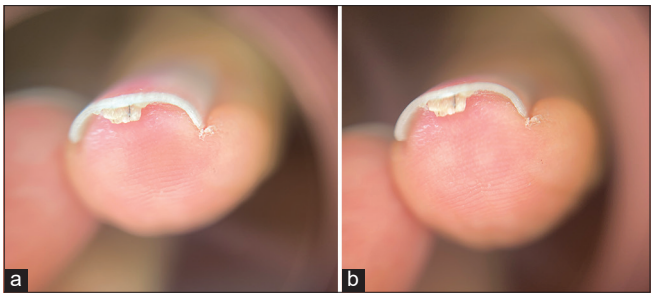


Figure 3: (a) Longitudinal erythronychia. (b) Dermatoscopy showing a close-up of longitudinal erythronychia.

neoplastic hyperplasia of the nail bed epithelium, and a concomitant response with other inflammatory nail diseases [3,6]. This neoplasm is commonly found in adults, with female predominance [1-7]. The clinical presentation of onychopapilloma is non-specific. The most common findings are longitudinal erythronychia, longitudinal leukonychia, distal uninterrupted or interrupted splinter hemorrhages, longitudinal melanonychia, yellowish-brown chromonychia, nail plate fissuring with or without a V-shaped notch, distal subungual keratotic papules, and onycholysis. The width of the bands ranges from 0.3 to 0.5 mm [1-4].



Figures 4: (a and b) Dermatoscopy of the subungual keratotic mass.

Most of the patients present associated symptoms, such as functional problems, as catching on fabrics, distal nail fragility, pain, tenderness, and cosmetic problems [3,5,6]. Onychopapilloma shows monodactylous involvement, principally, of the fingers. The most habitually affected digits are the thumbs, followed by the index, medium, and ring fingernails; the toes may also be affected, especially the halluces [1,2,4,5]. Dermoscopy usually reveals longitudinal erythronychia as a pale, whitish-pink band with sharp margins in the lunula continuing to extend to the nail bed as a pinkish-red band; splinter hemorrhages are visualized as a single or multiple, thin, interrupted, irregular lines; a yellowish-brown keratotic subungual mass in correspondence to the streak, in the distal margin; these features may be associated with distal onycholysis and nail plate fissuring [1,2].

The diagnosis is most readily made on an excision, yet transversal nail clipping may also be suggestive. The histological features of onychopapilloma involve acanthosis, papillomatosis, hyperplasia, metaplasia, hyperkeratosis, and hemorrhage of the distal nail matrix and nail bed [1-4,7]. Nail extraction of the hyperkeratotic lesions with curettage on the nail bed and an excisional biopsy may serve as a definitive treatment [2,3,6].

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published, and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

Statement of Ethics

Verbal and photographic informed consent was obtained from the patient described in this article.

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